

Table 5.3- Summary of deflection versus depth

Pile Information													Excavation Details (Δ_h = Horizontal Deflection (in))															
Pile Type	Pile Length (ft)	E (ksi)	Soil Cohesion (lb/ft ²)	Soil Friction	I (in ⁴)	S (in ²)	Yield Stress (ksi)	M _p (ft ³ /lb)	A _{cs} (in ² /ft)	Pile Width	Weight (lb/ft)	Wall Spacing (ft)	Δ_h @ 2.5'	Δ_h @ 5'	Δ_h @ 7.5'	Δ_h @ 10'	Δ_h @ 12.5'	Δ_h @ 15'	Δ_h @ 17.5'	Δ_h @ 20'	Δ_h @ 22.5'	Δ_h @ 25'	Δ_h @ 27.5'	Δ_h @ 30'	Δ_h @ 32.5'	Δ_h @ 35'		
5-5	20	29000	0	24.9	5.7	3.4	50	14167	4.85	18	11.3	40	0.0	0.8	3.9	6.9	n/a	n/a										
5-5	20	29000	270	24.9	5.7	3.4	50	14167	4.85	18	11.3	40	-0.1	0.1	0.5	1.1	2.1	4.5										
5-5	20	29000	540	24.9	5.7	3.4	50	14167	4.85	18	11.3	40	-0.1	0.1	0.4	0.9	1.7	2.9										
PZ22	20	29000	0	24.9	84.4	18.1	50	75417	6.47	18	22	40	0.0	0.2	1.0	3.9	4.1	0.0										
PZ22	20	29000	270	24.9	84.4	18.1	50	75417	6.47	18	22	40	-0.1	0.0	0.2	0.7	1.3	3.0										
PZ22	20	29000	540	24.9	84.4	18.1	50	75417	6.47	22	22	40	-0.1	0.0	0.1	0.5	1.1	2.1										
PZ22	25	29000	0	24.9	84.4	18.1	50	75417	6.47	22	22	40	0.0	0.1	0.8	2.4	5.2	7.1	7.2	n/a								
PZ22	25	29000	270	24.9	84.4	18.1	50	75417	6.47	22	22	40	-0.1	0.0	0.2	0.5	1.0	1.8	3.0	n/a								
PZ22	25	29000	540	24.9	84.4	18.1	50	75417	6.47	22	22	40	-0.1	0.0	0.1	0.4	0.9	1.5	2.4	3.9								
PZ22	30	29000	0	24.9	84.4	18.1	50	75417	6.47	22	22	40	0.0	0.1	0.7	2.0	5.2	5.5	n/a	n/a	n/a	n/a						
PZ22	30	29000	270	24.9	84.4	18.1	50	75417	6.47	22	22	40	-0.1	0.0	0.1	0.5	1.0	1.6	2.6	4.8	4.9	n/a						
PZ22	30	29000	540	24.9	84.4	18.1	50	75417	6.47	22	22	40	-0.1	0.0	0.1	0.4	0.8	1.4	2.0	2.9	4.2	7.9						
PZ22	35	29000	0	24.9	84.4	18.1	50	75417	6.47	22	22	40	0.0	0.1	0.6	1.8	4.5	9.2	10.2	n/a	n/a	n/a	n/a	n/a	n/a			
PZ22	35	29000	270	24.9	84.4	18.1	50	75417	6.47	22	22	40	-0.1	0.1	0.1	0.4	0.9	1.5	2.4	3.7	6.5	6.8	n/a	n/a				
PZ22	35	29000	540	24.9	84.4	18.1	50	75417	6.47	22	22	40	-0.1	0.1	0.1	0.4	0.7	1.3	2.0	2.8	3.7	5.2	7.4	9.8				
PZ22	40	29000	0	24.9	84.4	18.1	50	75417	6.47	22	22	40	0.0	0.1	0.6	1.8	4.5	8.2	8.2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
PZ22	40	29000	270	24.9	84.4	18.1	50	75417	6.47	22	22	40	-0.1	0.1	0.1	0.4	0.9	1.5	2.2	3.5	5.7	10.0	10.6	n/a	n/a	n/a	n/a	n/a
PZ22	40	29000	540	24.9	84.4	18.1	50	75417	6.47	22	22	40	-0.1	0.1	0.1	0.4	0.7	1.2	1.8	2.7	3.7	4.6	5.9	9.0	9.6	n/a	n/a	n/a
PZ27	20	29000	0	24.9	184.2	30.2	50	125833	7.94	18	27	40	0.0	0.2	0.8	0.9	n/a	n/a										
PZ27	20	29000	270	24.9	184.2	30.2	50	125833	7.94	18	27	40	-0.1	0.0	0.2	0.6	1.2	3.0										
PZ27	20	29000	540	24.9	184.2	30.2	50	125833	7.94	18	27	40	-0.1	0.0	0.1	0.4	1.0	2.0										
PZ27	25	29000	0	24.9	184.2	30.2	50	125833	7.94	18	27	40	0.0	0.1	0.6	1.8	4.4	8.0	n/a	n/a								
PZ27	25	29000	270	24.9	184.2	30.2	50	125833	7.94	18	27	40	0.0	0.0	0.1	0.5	0.9	1.6	3.4	8.7								
PZ27	25	29000	540	24.9	184.2	30.2	50	125833	7.94	18	27	40	0.0	0.0	0.1	0.3	0.8	1.4	2.2	3.7								
PZ27	30	29000	0	24.9	184.2	30.2	50	125833	7.94	18	27	40	0.0	0.1	0.5	1.4	3.6	8.2	8.3	n/a	n/a	n/a	n/a					
PZ27	30	29000	270	24.9	184.2	30.2	50	125833	7.94	18	27	40	0.0	0.0	0.1	0.4	0.8	1.4	2.2	4.3	5.6	n/a						
PZ27	30	29000	540	24.9	184.2	30.2	50	125833	7.94	18	27	40	0.0	0.0	0.1	0.3	0.7	1.2	1.8	2.8	4.0	7.6						
PZ27	35	29000	0	24.9	184.2	30.2	50	125833	7.94	18	27	40	0.0	0.1	0.4	1.2	2.9	6.1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
PZ27	35	29000	270	24.9	184.2	30.2	50	125833	7.94	18	27	40	0.0	0.0	0.1	0.4	0.8	1.3	2.0	3.1	5.4	12.1	12.7	n/a	n/a	n/a	n/a	n/a
PZ27	35	29000	540	24.9	184.2	30.2	50	125833	7.94	18	27	40	0.0	0.0	0.1	0.3	0.6	1.1	1.7	2.5	3.4	4.8	7.3	15.0				
PZ27	40	29000	0	24.9	184.2	30.2	50	125833	7.94	18	27	40	0.0	0.1	0.4	1.2	2.8	5.6	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
PZ27	40	29000	270	24.9	184.2	30.2	50	125833	7.94	18	27	40	0.0	0.1	0.1	0.4	0.7	1.3	1.9	2.9	4.1	n/a	n/a	n/a	n/a	n/a	n/a	n/a
PZ27	40	29000	540	24.9	184.2	30.2	50	125833	7.94	18	27	40	0.0	0.1	0.1	0.3	0.6	1.0	1.6	2.4	3.2	4.3	5.5	8.2	8.7	n/a	n/a	n/a